

REQUEST FOR PROPOSAL(S)

12/05/2012

CONTRACT FOR “SMALL FIRM” ENGINEERING SERVICES

STP-0040-01(023)V21 / 101635-002000

**Paving plans for SR 25 from approximately 2.5
miles south of Becker to existing US-278,
Monroe County**

**Issuing Office
Mississippi Department of Transportation
P. O. Box 1850
Jackson, Mississippi 39215-1850**

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PART 1
GENERAL INFORMATION FOR CONSULTANT(s)

I. Purpose

This *Request for Proposal* (RFP) is intended to provide interested **small** engineering firm(s) with sufficient information for the preparation and submission of a proposal for consideration by the Mississippi Transportation Commission (hereinafter referred to as the **COMMISSION**). To be considered, the firm must be an existing small business, as defined by Small Business Administration (SBA) standards and outlined in their current size standard(s) found in 13 CFR Part 121 appropriate for “Engineering Services” at the time of the initial publication of the Legal Ad for this RFP. The **small** firm will be requested to:

Develop Phase B Final Construction paving plans for SR 25 from approximately 2.5 miles south of Becker to existing US 278, Monroe County. The Final Construction paving plans will include pavement typical sections and details, plan-profile sheets, earthwork quantities, intersection details, form grade sheets, traffic control plans, pavement marking details, permanent signing plans, and other specified plan details and plan quantities for all items necessary for the construction of this project. All pavement thicknesses to be used will be provided by MDOT.

II. Issuing Office

This *RFP* is issued by the Mississippi Department of Transportation (**MDOT**) on behalf of the Mississippi Transportation Commission. CONSULTANT(s) submitting PROPOSALS must comply with the instructions in this RFP, Legal Ad, and any addenda. The issuing office is identified below:

Scot Ehrgott, P.E.
Mississippi Department of Transportation
P.O. Box 1850
Jackson, Mississippi 39215-1850
Or e-mail at sehrgott@mdot.state.ms.us

III. Intention of the COMMISSION

The intent of the **COMMISSION** is to negotiate a contract for professional engineering services with a **small** engineering firm to provide the services specified herein. This document does not and is not intended to include or address every item that will be included or addressed in the contract for professional services

IV. The Selection Process

Selection of CONSULTANT(s) will be based on the criteria established in the RFP and/or any addenda. CONSULTANT(s) **shall not** submit any cost or price information

with their proposals. CONSULTANT(s) for this PROJECT should submit complete PROPOSALS sufficient for final selection of the most qualified firm. The MDOT will then select the most qualified firm based on the criteria. The **COMMISSION** reserves the right to select the CONSULTANT(s) for negotiations using one of the following methods:

- A. Final ranking of all proposals based on the initial response to this *RFP*, or
- B. Selection of a *Short List* of at least two and not more than five qualified CONSULTANT(s), if available. Firms on the *Short List* will then be asked to make presentations to the appropriate MDOT staff. The *Short-listed* CONSULTANTs will be notified by a written letter. The letter will also indicate all pertinent information necessary to prepare for the presentation. If this *Short List* method is used, final ranking will be made after the Selection Committee evaluates the *short-listed* firms.

The most qualified firm will be selected to enter into negotiations with the MDOT for costs and schedule. The MDOT will draft a contract for the selected CONSULTANT to execute based on the description of work established in this RFP and/or any addenda. If the selected CONSULTANT and MDOT are unable to negotiate a fair and reasonable price for the project, or if the selected CONSULTANT does not execute the contract or is unable to meet any contractual requirements, then MDOT may reject the most qualified firm for the duration of this process and select the next most qualified firm on the list until a contract has been executed.

V. Type of Contract

The contract shall be a **cost plus fixed fee, labor hour/unit cost or lump sum/firm fixed price to include a maximum “not to exceed” amount**. The contract may include all appropriate Federal contract provisions in accordance with 49 CFR, Part 18, as revised. The contract will provide general terms and conditions for performance of services, as well as specific instructions for fees, billing, payment, etc.

While cost will not be part of the evaluation criteria, cost will be negotiated at a later date between the selected CONSULTANT and MDOT for all necessary services provided to MDOT in support of this PROJECT. Direct Expenses may be reimbursable but will count towards the not to exceed cost negotiated as part of the contract.

An example of a typical MDOT professional service contract template may be found on the website at the web link indicated below. The template will be identified as “Engineering Service Contract template- Small Firm”.

<http://sp.gomdot.com/Consulting%20Services/Pages/Templates.aspx>

The **COMMISSION** intends to utilize this template in order to execute a contract with the selected CONSULTANT.

NOTE: This RFP does not and is not intended to include or address every item that will be included or addressed in the contract for professional services.

VI. Rejection of Proposals and/or discontinue contract execution

The **COMMISSION** reserves the right to reject any and all Proposals and/or to discontinue contract execution or contract negotiations with any party at any time prior to final contract execution.

VII. Costs Incurred by CONSULTANT Prior to Execution of a Contract

The **COMMISSION** shall not be liable for any costs incurred by any CONSULTANT prior to the execution of a contract by all parties. Further, the **COMMISSION** shall not be liable for any costs incurred by the CONSULTANT under the contract prior to the effective date of the Project Director's Notice to Proceed.

VIII. Addenda and/or questions to this RFP

Only written requests by e-mail to the below addressees will be considered.

Scot Ehrgott
sehgott@mdot.state.ms.us;

and "copy" (Cc)
Stephen Rone:
srone@mdot.state.ms.us

No requests for additional information or clarification to any other MDOT office, CONSULTANT, or employee will be considered. All responses to written questions and addenda will be in writing and will be posted to the MDOT website indicated below:

<http://sp.gomdot.com/Consulting%20Services/Pages/LegalAdvertisements.aspx>

CONSULTANTs shall be solely responsible for checking the website for updates. The MDOT will not be responsible for any oral exchange or any exchange of information that occurs outside the official process specified herein.

All written questions shall be e-mailed to the below addressee no later than **January 14th, 2013, 5:00 p.m., Central Standard Time.**

MDOT intends to post written answers for this PROJECT to the website indicated above no later than **January 17th, 2013.**

X. CONSULTANT Submission

To be considered, **six (6) copies** of the CONSULTANT's proposal must be received by **5:00 p.m., Central Standard Time, Thursday, January 24th, 2013**, at the front desk of the office of Consultant Services Unit addressed to Scot Ehr Gott, 10th floor, Mississippi Department of Transportation Building, 401 North West Street, Jackson, Mississippi, 39201.

Proposals received after **5:00 p.m., Central Standard Time, Thursday, January 24th, 2013**, may be deemed non-responsive.

XI. Proposals

To be considered, CONSULTANT(s) must submit a complete response to this *RFP and any addenda*, addressing those requirements provided in Part 2 of this RFP. No other distribution of proposals shall be made by the CONSULTANT. The original and all required copies of the proposal must be signed by an official authorized to bind the CONSULTANT to its provisions.

XII. Economy of Preparation

Proposals should be prepared simply and economically, providing a straightforward, concise description of the CONSULTANT'S ability to meet the requirements of the *RFP and any addenda*.

XIII. Prime Consultant Responsibilities

The selected CONSULTANT(s) will be required to assume responsibility for all services offered in the proposal whether or not they are produced directly by the CONSULTANT(s) or through subconsultant(s). Furthermore, the **COMMISSION** will consider the CONSULTANT(s) selected to be the sole point of contact with regard to contractual matters, and the MDOT retains the right to approve or disapprove all proposed subconsultant(s). CONSULTANT(s) responding to this *RFP* must identify all proposed partners and subconsultant(s).

Under no condition will the selected CONSULTANT be allowed to sublet or subcontract more than 40% of the work required under the contract. It is clearly understood and agreed that specific projects or phases of the work may be sublet or subcontracted in their entirety provided that the selected CONSULTANT performs at least 60% of the overall contract with its own forces.

The CONSULTANT's firm must be registered with the Mississippi Secretary of State's office to do business in the State of Mississippi prior to contract execution. Failure to comply with this requirement within 30 days of selection notification may result in failure to execute a contract with the selected CONSULTANT. MDOT may then reject the selected firm for the duration of this process and negotiate a contract with the next most qualified firm on the list until a contract has been executed.

XIV. Disclosure of Proposal Contents

All materials submitted in response to this *RFP* shall become the property of the **COMMISSION** and may be returned only at the **COMMISSION**'s option. All information submitted in response to this *RFP* shall be subject to disclosure under the Mississippi Public Records Act and any other applicable law.

XV. Nondiscrimination Requirement

By submitting a response to this *RFP*, the CONSULTANT agrees that they understand that the **COMMISSION** is an equal opportunity employer. It is the policy of the **COMMISSION** to comply with all applicable portions of Title VI of the Civil Rights Act of 1964 which prohibits unlawful discrimination based on race, color, creed, sex, age, national origin, physical handicap, or disability. The proposed contract will require that the CONSULTANT and all subconsultant(s) agree to strictly adhere to this policy in all employment practices and provision of services.

In the event the CONSULTANT performs work for the **COMMISSION** that involves the selection of a site or location of a facility, the CONSULTANT shall utilize criteria or methods of selection which consider the impacts and benefits of the facility on persons without discrimination because of their race, color, religion, sex or national origin. The criteria and methods shall be designed to include proactive measures for obtaining citizen participation from persons of all applicable races, colors, religions, sexes and national origins.

XVI. Disadvantaged Business Enterprise (DBE) Goal

The DBE goal for this PROJECT is 3%. The CONSULTANT shall exercise all necessary and reasonable steps to ensure that participation is equal to or exceeds the contract goal. CONSULTANT(s) may visit MDOT's website, www.gomdot.com, to view a complete list of "Certified DBE Firms" which have been certified as such by the Mississippi Department of Transportation and other Unified Certification Partners (UCP). The DBE firm must be on the Department's list of "Certified DBE firms" as listed on MDOT's website, www.gomdot.com, and approved by MDOT to perform the classification of work to count towards meeting the DBE goal.

XVII. Notification of Selected CONSULTANT(s)

The selected CONSULTANT(s) for both the "Short-List" (if necessary) and the final selection will be notified of their status by the **MDOT**. The CONSULTANT(s) whose proposals are not selected will be notified, in writing, of the name of the selected CONSULTANT(s) at the same time.

XVIII. Debriefing request(s)

If a CONSULTANT opts to request a debriefing following the announcement of the selected CONSULTANT, the CONSULTANT shall send an email to the below addressee

within two (2) weeks of the distribution of the notification letter of the selected CONSULTANT. Any debriefings shall be limited to the merits of the individual CONSULTANT's proposal.

Scot Ehrgott, P.E.
sehgott@mdot.state.ms.us

and "copy" (Cc)
Stephen Rone:
srone@mdot.state.ms.us

XIX. Contract Administration

The CONSULTANT contract will be administered by the **MDOT**. All payments will be made to the contracted prime CONSULTANT(s) by the **MDOT**. The prime CONSULTANT will be responsible for all payments to its partners and/or subconsultant(s).

XX. Key Personnel Modifications

Key Individuals and team members are to remain for the duration of the Project and changes cannot be made without prior MDOT approval. Modifications of Key Individuals are discouraged. MDOT will not approve requests for modification without justification. Examples of justification include death of a team member, changes in employment status, bankruptcy, inability to perform, organizational conflict of interest, or other such significant cause. In order to secure MDOT's approval prior to execution of the contract, the CONSULTANT shall e-mail the below addressee:

Scot Ehrgott, P.E.
sehgott@mdot.state.ms.us

and "copy" (Cc)
Stephen Rone:
srone@mdot.state.ms.us

The request shall include:

- A. The nature of the desired change;
- B. The reason for the desired change; and
- C. A statement of how the desired change will meet the required qualification for the position/responsibility.

XXI. Project Schedule

MDOT strongly desires completion of PROJECT activities in the shortest practical time frame. CONSULTANTS are encouraged to explore and justify means by which the PROJECT schedule may be expedited without jeopardizing the overall PROJECT success or by posing an unacceptable burden to MDOT. MDOT will not sacrifice functionality or quality for the sake of a more rapid implementation of the PROJECT. Upon selection, negotiation, and execution of the contract, the MDOT anticipates the duration of the project to be approximately **6 months** for completion.

The following Schedule identified below lists the projected dates for the procurement of this contract.

<u>Procurement Schedule (*Estimate dates only)</u>	
Advertisement dates for legal notice	December 5, 2012 & December 12, 2012
Deadline for CONSULTANT'S written questions	January 14, 2013; 5:00 p.m.
* Deadline for answering written questions	* January 17, 2013
Deadline for delivery of PROPOSALS	January 24, 2013; 5:00 p.m.
* Selection of qualified CONSULTANT	* March 20, 2013

Note: All times are Central Standard Time.

PART 2

INFORMATION REQUIRED / SELECTION CRITERIA

I. Format for PROPOSAL

To be considered, the PROPOSAL must respond to all requirements of this RFP, the Legal Ad, and any addenda. The recommended PROPOSAL length should not exceed twenty five (25) pages, exclusive of appendices. All resumes, certifications/licenses, SF-330 – Part II, and the small firm application should be included in the appendices. The following information should be included in the 25 page maximum: the CONSULTANT's cover letter, table of contents, org chart, summaries and introductions, and responses to the evaluation criteria indicated in Part 2, Section III of this RFP. Pages should be numbered, single-spaced, one-sided, 8.5" by 11" with margins of at least one inch on all four sides. No more than five pages may be 11" by 17", but they shall count as two sheets each against the recommended 25-page maximum. Information within the recommended 25-page limit of the PROPOSAL must be complete and sufficient in scope for the selection committee to evaluate the CONSULTANT. Also, all text information in the 25-page limit should be shown in a readable font, size 12 points or larger. Headers, charts, and other graphics may be provided in a different font type and size providing they are legible. Section dividers, tabs, or similar means are recommended but are not counted as part of the recommended 25-page maximum.

These recommendations and other instructions indicated in this RFP will be considered when evaluating the quality of the firm's proposal.

II. Requirements of the Proposal

Consulting firms interested in providing these services may so indicate by furnishing the Department six (6) copies of a PROPOSAL. The CONSULTANT should divide its PROPOSAL into the following sections as listed below, clearly separated by tabs, section dividers, or similar means (however, resumes, certifications/licenses, SF-330 – Part II, and the small firm application should be included in the appendices). MDOT reserves the right to obtain references and additional information from any source listed in the PROPOSAL and any other source deemed appropriate for any of the requirements/criteria listed in this RFP. The quality of the proposal will be considered when evaluating the firm's PROPOSAL. The PROPOSAL should provide as a minimum the following information:

A. Provide a Cover Letter:

The CONSULTANT should provide a cover letter and introduction specifying the name and complete description of the PROJECT defined in the Legal Ad, the name of the prime CONSULTANT and any of its subconsultant(s), the name of an individual who will be the single point of contact throughout the selection process, and the location and address of the office of the firm which will be coordinating efforts for the PROJECT and the office location where a majority of the work will take place. In addition, the CONSULTANT must note if they are submitting as part of a joint venture.

B. Identify personnel and provide resumes for the evaluation of the CONSULTANT's staff and any subconsultant's staff (if assigned):

The CONSULTANT(s) should propose an appropriate quantity and quality of staff to ensure the successful completion of this PROJECT with limited MDOT support. The CONSULTANT should provide a team organizational chart that identifies all proposed personnel of the CONSULTANT and any subconsultant(s) for the project. The team organizational chart should include each individual's name, job description (for the project), and company of employment.

The CONSULTANT(s) should provide resumes for each principle member, the project manager, and employee(s) of the firm anticipated to be assigned to the project. **In addition, the proposal should include proof that the project manager is licensed as a Mississippi Professional Engineer and that the firm has met state licensure and certification requirements¹.** Resumes for any other known personnel that would be assigned to this PROJECT may also be included but are not required. Resumes must reflect qualifications and recent experience relevant to the Project Description indicated in this RFP. MDOT prefers that the CONSULTANT's Project Manager be on the permanent staff of the CONSULTANT.

C. Provide the CONSULTANT's (and any subconsultant's) past experience on Roadway Design Projects related projects with MDOT and/or other clients:

It is preferred that the CONSULTANT(s) provide in its PROPOSAL descriptions of similar type work for roadway design related projects performed during the past five (5) years which qualifies the CONSULTANT(s) (and any subconsultant) for this work. This project description should include the work related to the project description established in Part 3 of this RFP. The project(s) listed shall describe work related to roadway design for previous projects performed by the CONSULTANT and/or their subconsultant(s) with MDOT and/or other clients. Each related project description should include a brief scope of the project, contract amount, project time frame, a project client contact name, contact title, contact phone number, contact fax number, and contact email address.

D. Consultant's knowledge of the project:

The CONSULTANT(s) should provide a description of their understanding of the project and the actions that will take place to complete the project. The environmental document, re-evaluation document, Final ROW plans, and grading plans are available at the following Web-address:

¹ *Miss. Code Ann Sections 73-13-1 through 73-13-45 (1972) (as amended) govern the practice of engineering in Mississippi. Firms are encouraged to contact the Mississippi Board of Licensure for Professional Engineers and Surveyors at (601) 359-6160 to insure that individuals and firms are qualified to offer and provide services in the State of Mississippi. The Board's web address is www.pepls.state.ms.us.

<http://sp.mdot.ms.gov/Consulting%20Services/Pages/LegalAdvertisements.aspx>

E. Complete the following Form - Part II of Standard Form (SF) 330, Architect-Engineer Qualifications. This form can be obtained at

<http://sp.mdot.ms.gov/Consulting%20Services/Pages/Forms.aspx>

F. Complete the “Small Firm” application* and required tax forms.

This form can be obtained at

<http://sp.mdot.ms.gov/Consulting%20Services/Pages/Forms.aspx>

Once you open the above link, simply click on Small Business Concern Application in order to open the document.

The CONSULTANT should submit this application and the firm’s tax returns for the past three years to verify that the firm meets the requirements as stated in Part 1 of this RFP. The application and tax returns for the past three years should be **provided in the appendix of the CONSULTANT’s proposal.**

III. CONSULTANT selection criteria

All responsive proposals received from CONSULTANT(s) will be reviewed and evaluated by the Selection Committee based on the selection criteria listed below.

The following evaluation criteria, in order of their relative importance to the Selection Committee, will be evaluated in making the selection:

- A. Experience, performance, and qualifications of the team’s staff;
- B. Consultant’s (and any subconsultant’s) past experience, performance, and qualifications on Roadway Design Projects with MDOT and/or other clients;
- C. Consultant’s knowledge of the project;
- D. Location/proximity of office(s)
- E. Quality of Proposal

PART 3 PROJECT DESCRIPTION

NOTE: This document does not and is not intended to include or address every item that will be included or addressed in the contract for professional services.

*** For the CONSULTANT's reference, the following example set of plans and guidelines are provided by MDOT:*

1. *An example set of roadway plans*

This information may be downloaded at the following web address:

<http://sp.mdot.ms.gov/Consulting%20Services/Pages/LegalAdvertisements.aspx>

The following information is a description of work that is anticipated to be performed for this PROJECT. A more detailed scope of work will be negotiated with the selected CONSULTANT during negotiations. A monthly status report of the PROJECT will be required.

1. TYPICAL ITEMS/MATERIALS PROVIDED BY MDOT:

MDOT may provide within normal resources of MDOT, the following:

1. Maps, aerial photographs, and other cartographic items as may be available;
2. Available old construction plans, drawings, and maps pertinent to the project;
3. Traffic data, including volume, classification, and turning movement counts, required for the analysis and provided for the contract;
4. Available traffic growth rates, design and peak hour factors;
5. Copies of MDOT publications, regulations, and standards, as applicable. Examples include, but are not necessarily limited to, County and City Traffic Books, Classification Reports;
6. Copies of previous studies/analyses, environmental assessments, conceptual plans, and other information pertaining to the project;
7. Names, addresses, and telephone numbers of points of contact which may prove useful to the CONSULTANT in conducting this analysis;
8. A single point of contact within MDOT for day-to-day coordination of the contract;
9. Sample plans;
10. Pavement design;

11. Special provisions, interim standard specifications, and pay item numbers that are presently being utilized by MDOT that are not shown in the MDOT Standard Specification book;
12. Computer files (depending on availability) may include CADD files, GIS data, or Survey Control Points set by District Surveyors on or near the project.
13. MDOT may elect to grant the CONSULTANT a temporary MicroStation/GeoPak license for the duration of the project's life if deemed necessary.

2. GENERAL REQUIREMENTS:

The CONSULTANT will develop Phase B Final Construction paving plans for SR 25 from approximately 2.5 miles south of Becker to existing US 278, Monroe County. As directed, the CONSULTANT shall provide engineering/technical assistance to perform specific assignments requiring needed expertise or staff resources unavailable to MDOT.

Manuals, guides, and specifications applicable to this PROJECT shall be those approved and/or adopted by MDOT and/or the COMMISSION and in effect on the effective date the contract unless stated otherwise or subsequently directed by MDOT or the COMMISSION during the course of the contract.

Roadway design shall be in compliance with the COMMISSION's MDOT Roadway Design Manual, and supplemented with updated design policies as described in design memos located on Roadway Design Division's FTP site, AASHTO'S Policy on Geometric Design Of Highways and Streets; MDOT Standard Drawings (roadway and bridge), MDOT Roadway CADD Manual; MDOT Standard Specifications for Road and Bridge Construction; Manual on Uniform Traffic Control Devices (MUTCD); MDOT Access Management Policy; and MDOT Survey Manual. The latest edition of the aforementioned documents shall be used.

The contract shall be performed using English units, unless stated otherwise by the COMMISSION.

All plan sheets shall be developed **with MicroStation V8 XM, or later, and GeoPak.**

If deemed necessary, the CONSULTANT will be advised of a time and place for a meeting to discuss the proposed work. Also, if necessary, the COMMISSION may authorize the CONSULTANT to conduct a field inspection of the proposed work to obtain essential information for preparing an estimate of time and costs to perform the work.

The CONSULTANT shall not begin work in any phase of the contract until a written NOTICE TO PROCEED for that phase has been issued.

For contract plan sheets:

All preliminary plans shall be marked "PRELIMINARY, NOT FOR CONSTRUCTION" on each sheet. Once plans are complete, the "PRELIMINARY" markings shall be removed, and the Roadway Title sheet and all Detail Index sheets shall be signed and sealed/stamped by the

CONSULTANT's engineer. If the scope of the CONSULTANT's work is limited to certain aspects of the plans, the scope shall be briefly noted near the seal/stamp (e.g., "ROADWAY AND LIGHTING ONLY" or "BRIDGE AND RETAINING WALL ONLY"). If multiple CONSULTANTS develop the plans, each firm shall sign and seal/stamp the title sheet. The prime consultant shall stamp every Detail Index sheet, and each sub-consultant shall stamp the index sheet containing the section of the plans worked on by that sub-consultant.

It is the responsibility of the CONSULTANT to request and receive approval from the Project Manager prior to making any changes to plans developed under this contract. This requirement includes plans developed by any sub-consultants.

Other provisions herein notwithstanding, in emergencies due to bridge damage, verbal Notice To Proceed with a follow-up letter of authorization may be given to the CONSULTANT by MDOT's Chief Engineer, or designee, to assess the damage, make recommendations for remedial safety measures and obtain essential information for preparing an estimate of time and cost.

It is anticipated that the PROJECT will include the following:

PHASE B: CONTRACT PLANS

Part 1 -- Design Conference

Part 2 -- Office Review Plans

Part 3 -- Final Contract Plans

OVERVIEW OF REQUIRED SUBMITTAL FORMAT:

Print Type	**Printed Sheets (Full Scale)		**Printed Sheets (1/2 Scale)		PDF Images		CADD Files	
	Plans	XS	Plans	XS	Plans	XS	Plans	XS
Office Review			1 Set	1 Set	Yes	Yes		Yes
Final Plans*	1 Set				Yes	Yes	Yes	Yes

* See Plan Requirements for Roadway Plans in the section below.

** Color Plan & Profile Sheets as described in the PDF Images section below are required for Printed Sheets.

ROADWAY PLAN REQUIREMENTS:

Roadway plans submitted in the form of original drawings shall be ink drawings (plots) on vellum or opaque paper. Photographic reproduces may be submitted in lieu of ink drawings, provided that said reproduces are on 0.004 inch translucent polyester film which incorporates a silver halide emulsion image on a permanent type. Diazo or ammonia type reproductions will not

be acceptable nor will adhesive drafting aids be acceptable on final plans. All additions or revisions shall be done by CADD. All additions or revisions will require the submittal of revised CADD files on CD/DVD with a project description (including Project Number, Route, and County) and the word, "REVISION," and the date written on the exterior of the disk or CD/DVD.

A. Scale of Drawings:

Plans shall be prepared at the following scales:

		<u>RURAL</u>	
		<u>URBAN</u>	
(1) Plan/Profile Sheets with Geometrics			
Horizontal - - - - -	20'	1" = 100'	1" =
Vertical - - - - -		1" = 10'	1" = 5'
(2) Form Grades for Channelized Intersections			
And Interchange Ramps - - - - -	20'	1" = 20'	1" =
(3) Detail Geometrics for Channelized Intersections			
20'		1" = 20'	1" =
(4) Cross-Sections - - - - -		1" = 10'	1" = 5'
(5) Other sheets at appropriate scale.			

B. Size of Drawings:

All drawings shall measure 22x36 inches and shall have a left-hand margin of 1-1/2 inches, top & bottom margins of 1/2 inch, and right-hand margins of 1/4 inch. Trim lines will not be necessary on these plans.

C. Size of Lettering:

The COMMISSION's policy requires the contract plans to be a 50% reduction of the original plans; therefore, the CONSULTANT shall provide a minimum letter size of 1/8 inch (preferably 0.15 inch) in order to be legible when reduced to 50% of the original size. All plans submitted by the CONSULTANT shall conform to the quality standards adopted by the COMMISSION as shown in the Design Manual and the Project Director may reject any plans not conforming to these standards.

D. PDF Images:

Format and file names of PDF's shall be as described below and in Roadway Design Division's CADD Manual.

a) Adobe PDF – Multi-Page (**Plans must be in order.**)

b) Color of plans:

- Plan & Profile Sheets – Color – Controlled by Pen Tables RwdPdf_Color.tbl or RwdPdf_Color_Final.tbl

The Pen tables establish different colors based on levels for the following elements in the resulting prints:

Proposed Elements - Black

Proposed Hydraulic Elements - Blue

Existing Elements - Maroon
Profile Grid – Light Brown

Elements will need to be on correct levels.

- All Other Sheets – Black & White (Including Erosion Control Sheets)
 - Exceptions - Colors are allowed on any special design sheets where the designer thinks color will aid in clarity (i.e. Traffic Control). Any Special Design Sheets where color is used shall follow the Plan & Profile sheets in the plans (Group all color sheets together) and should have a legend explaining the difference in the colors. Only darker colors should be used on these Special Design Sheets and red and green cannot be used. If Pen Tables other than described above is used, they should be submitted with CADD File deliverables.
- c) Page Size - All Electronic Prints (Images) need to be Full Scale (**22"x34.6"**)
- d) Content - Ensure all data is present on the PDF images (Correct Levels On/Off, Correct Reference Files On/Off, etc.)
- e) Rotation - The PDF's should be rotated so that they are readable when opened.
- f) Resolution – 400-600 DPI
- g) RWDPDF.set shall be used in the creation of the PDF's with IPlot.
- h) RWDPDF.pltcfg shall be used in the creation of the PDF's with Microstation Plot.
- i) PDF Version – 1.7 minimum.
- j) Other settings required which are set by default using RWDPDF.pltcfg in Microstation Plot but have to be manually set under "PDF Format Configuration" if using Iplot:

Engineering Links (On)
Searchable Text (On)
Level Label (OFF)
Disable Save Views/Reference Bookmarks (On)

- k) Filename: FMSNUMBER -Date-Print Type.PDF
- * Each Final ROW revision requires 2 documents to be submitted, one with only revisions, and the other with the most current ROW plans.
 - * Cross Sections should be submitted in separate multi-page files.

Examples:

100078-201000-2009-04-05-HydraulicSurvey.PDF
100078-201000-2009-04-05-Conceptual.PDF
100078-201000-2009-09-05- PreROW.PDF
100078-201000-2009-11-05-FI.PDF (*Field Inspection*)
100078-201000-2010-01-08-FinalROW.PDF (*Final ROW*)
100078-201000-2010-01-08-FinalROWXS.PDF (*Final ROW XS*)

100078-201000-2010-02-03-FinalROW.PDF (*Final ROW Revision*) (*Contains all sheets with revisions – Current set of plans*)

100078-201000-2010-02-03-FinalROWRev.PDF (*Final ROW Revision*) (Contains Title Sheet & just revised sheets.)

100078-301000-2010-11-10-OfficeReview.PDF

100078-301000-2010-11-10-FinalPlans.PDF

100078-301000-2010-11-10-FinalXS.PDF

3. SPECIFIC WORK REQUIREMENTS FOR PHASE B CONTRACT PLANS:

PHASE B shall consist of all services required for the production of final contract plans.

Roadway plans shall conform to Roadway Design Division's CADD specifications as described in Roadway Design Division's CADD USER'S MANUAL.

Unless stated otherwise in the contract, the following specific requirements are typical for this phase:

Part 1 - DESIGN CONFERENCE

The purpose of the Design Conference is to discuss any updated procedures or policies the COMMISSION may have enacted that would impact the final design phase of the project. These items would not be considered extra work but would help to minimize the number of corrections that are generated at the Office Review stage. The design conference may also require a visit to the project site.

Part 2 - OFFICE REVIEW PLANS

After the Office Review plans (100% plan development, pending final review) are complete, the CONSULTANT shall submit one (1) set of reproducible plans and quantity calculations in 8.5"x11" format for review by the COMMISSION. A pdf file of the quantity calculations shall also be submitted. A final Office Review will be required and the CONSULTANT shall be required to attend. Allow approximately three (3) weeks from the submittal date of the reproducibles for scheduling and completing the Office Review. In the office review, the COMMISSION shall review and mark the plans with all required revisions.

After the Office Review is conducted, the CONSULTANT shall provide the COMMISSION with a written updated construction cost estimate. This estimate shall be based on the plan quantities and historical cost data for the pay items.

Part 3 - FINAL CONTRACT PLANS

The final contract plans shall include all items required in the final right-of-way plans and all other information such as, but not limited to:

- A. ROADWAY PLANS: Title sheet; detailed index; general notes; typical sections; summary of quantities; estimated quantities; plan-profile sheets; special design sheets; traffic control plan; complete form grades for channelized intersections (in accordance with current Design Manual, at 25 feet intervals); permanent directional signing sheets that include layouts, details (signs and overhead assemblies), and estimated quantities; detailed pavement marking sheets; Right-of-Way Coordinate Sheet(s), final cross-sections; and all notes and data used to develop the plans.

The final contract plans shall be accompanied by a written certification and completed checklist from the CONSULTANT that a detailed check of the plans, including quantity computations, has been made prior to submission. This review is to include a detailed check of the earthwork quantities for any amount of earthwork, unless otherwise approved by the COMMISSION. The CONSULTANT shall submit a list of all comments, the resolution to the comments, and one (1) PDF scan of the marked-up plans used to complete the CONSULTANT's internal quality control review to confirm that a detailed review has been performed by the CONSULTANT prior to final contract plans submittal. The plans may not be accepted without this written certification and completed checklist.

Final contract plans shall be submitted as original drawings.

All related electronic files shall be submitted with original drawings on CD/DVD with a project description (including Project Number, Route, and County) and the words "Final Plans," and the date written on the exterior of the disk. In lieu of CD/DVD, the CONSULTANT may transmit the files by FTP or e-mail. The electronic CADD files may be in a compressed (zipped) format.

The CONSULTANT shall prepare all special provisions pertinent to the intent of the plans unless the COMMISSION has on hand suitable special provisions that will be used.

4. TRAFFIC ENGINEERING:

A. PERMANENT SIGNING PLANS AND DETAILS:

Permanent signing plans and details for new construction projects shall be developed in accordance with the requirements of the MUTCD, MDOT signing policies and practices and at the direction of the Roadway Design Division Engineer, while in consultation with the Traffic Engineering Division.